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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,680	07/28/2003	Georgi A. Atanasov	A213 1010.1	4613
26158	7590	11/12/2004	EXAMINER	
WOMBLE CARLYLE SANDRIDGE & RICE, PLLC			LEPISTO, RYAN A	
P.O. BOX 7037			ART UNIT	
ATLANTA, GA 30357-0037			PAPER NUMBER	
			2883	

DATE MAILED: 11/12/2004 . .

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,680

Applicant(s)

ATANASOV, GEORGI A.

Examiner

Ryan Lepisto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 26-32 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-25 and 33-67 is/are allowed.
- 6) ☒ Claim(s) 1,2,68 and 69 is/are rejected.
- 7) ☒ Claim(s) 3-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

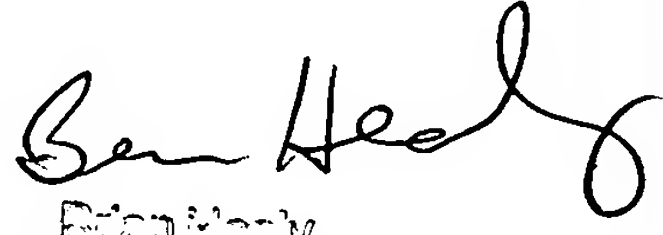
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


Brian Healy
Primary Examiner

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 20 October 2004, with respect to the rejection(s) of claim(s) 1, 2, 8, 14 and 22 under 35 U.S.C 102(a)/(e) have been fully considered by the examiner, but they are considered to be moot in view of the newly added claims and/or limitations in the present amended claims.

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Election/Restrictions

3. **Claims 23 and 24** are now in condition for allowance and therefore these claims are withdrawn from restriction and because objected **claims 11 and 12** are similar to claims 23 and 24, all claims are withdrawn from the restriction requirement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-2 and 69** are rejected under 35 U.S.C. 102(e) as being anticipated by **Somekh et al (US 6,381,021)** (Somekh). Somekh teaches (Figures 1 and 5) an optical monitoring system for measuring reflectivity of deposited films, said system comprising: a showerhead support (116) configured to be attached on an inside of a chamber (103) that serves as means for supporting a first fiber optic collimator (217); a first fiber optic collimator (217) coupled to said support (116); a first fiber channel (270) for incoming light optically coupled to said first fiber optic collimator (217); and a second fiber (214) for outgoing light optically coupled to said first fiber optic collimator (217), a

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substrate holder (104) configured to hold the substrate (106); and a first blocker (126) that prevents incoming deposition material from contacting at least a first portion of the substrate (106) and a second blocker (116) that prevents incoming deposition material from contacting at least a second portion of the substrate (106).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claim 68** is rejected under 35 U.S.C. 102(b) as being anticipated by **Zhou et al (US 6,039,806)** (Zhou). Zhou teaches an optical monitoring system for monitoring thin film deposition on a substrate (Fig. 3 and 5) comprising a first fiber (91) for incoming light coupled to a first monitoring optical device (47), a second fiber (92) for outgoing light optically coupled to the first monitoring optical device (47) (column 6 lines 11-16) and a first shutter (66) movable between an open position that allows incoming material to contact the substrate and a closed position that prevents incoming material from contacting at least a portion of the substrate (column 4 lines 1-5).

Allowable Subject Matter

6. **Claims 3-13** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims would be allowable over the prior art of record if rewritten in independent form including all of the limitations of the base claim and any intervening claims because the latter, either alone or in combination, does not disclose nor render obvious a first or second shutter that is movable between an open and closed state allowing and not allowing incoming deposition material from contacting a portion of a substrate, a fiber optic collimator comprising a two-fiber ferule, an alignment glass rod, a tap optical filter and a GRIN lens, and a second collimator coupled to a second fiber optic collimator, in combination with the rest of the claimed limitations.

7. **Claims 14-25 and 33-67** are allowed. These claims are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a first or second shutter that is movable between an open and closed state allowing and not allowing incoming deposition material from contacting a portion of a substrate, a fiber optic collimator comprising a two-fiber ferule, an alignment glass rod, a tap optical filter and a GRIN lens, and a second collimator coupled to a second fiber optic collimator, in combination with the rest of the claimed limitations.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RAZ

Ryan Lepisto

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Date: 11/3/04

Frank Font

Supervisory Patent Examiner

Technology Center 2800

Brian Healy

Brian Healy
Primary Examiner